

In the Specification:

Delete the paragraph starting on Page 1, line 14, and replace with:

a1
Serial No. 08/691,852, now U.S. Patent No. 5,956,484, entitled "Method and Apparatus for Providing Force Feedback over a Computer Network," filed August 1, 1996; and

Delete the paragraph starting on Page 1, line 14, and replace with:

a2
Serial No. 08/664,086, now U.S. Patent No. 6,028,593, entitled "Method and Apparatus for Providing Simulated Physical Interactions within Computer Generated Environments," filed June 14, 1996, which claims priority of provisional application serial no. 60/017,803, filed May 17, 1996, all of which are incorporated herein by reference for all purposes.

Delete the paragraph starting on Page 10, line 16, and replace with:

a3
In use, the user 52 of the client machine 46 grasps the user object 76 (or "manipulandum") of the force feedback device 50 and manipulates (*i.e.* exerts a force to move or attempt to move) the user object to cause a "pointer" or other graphical object to move in the image displayed by the display device 64. For example, a pointer typically takes the form of a small arrow, a pointing hand, or the like. The sensor 75 senses the movement of the user object 76 and communicates the movement to the local microprocessor 68 through the sensor interface 72. The local microprocessor 68 then communicates through serial port 88, game port 90, or both to the microprocessor 36 to cause the microprocessor 36 to create a corresponding movement of the pointer on the image displayed upon the visual display 64. In some embodiments, the sensors 74 can communicate directly to microprocessor 36 without the use of local microprocessor 68. The user can also create other input, such as a "button click," through the other input 78 which are communicated to the microprocessor 36 by the local microprocessor 68 or directly, *e.g.*, using a game port. The user object 76 can take many forms, including a joystick, mouse, trackball, steering wheel, medical instrument, representation of a body part, gamepad controller, etc., as described in Patent Nos. 5,734,373, 6,028,593, and 6,100,874, all incorporated by reference herein.

Delete the paragraph starting on Page 19, line 35, and replace with:

a4
These and other forces resulting from a pointing icon interacting with various objects displayed on a computer screen are also described in co-pending patent application serial no. 08/571,606 filed 12/13/95, the disclosure of which is incorporated herein by reference.

Delete the paragraph starting on Page 27, line 26, and replace with:

Many types of feel sensations can be sent across the network and combined in various ways. For example, a constant force or a spring force can be commanded to be applied to the force feedback interface device over the network, and other feel sensations/forces such as vibrations sensations can also be commanded over the network to be simultaneously overlaid on the constant or spring force. For example, the first user can press a button that causes the force feedback massage interface of the second user to output a vibration sensation over any forces already being experienced. A user can design a feel sensation using a feel sensation editor, such as shown in U.S. Patent Nos. 6,147,674 and 6,169,540, both assigned to the assignee of the present application and incorporated herein by reference. This allows the users to design, for example, a massage vibration sensation – including magnitude, direction, envelope, waveform, and to send the created sensation to a different user's site to be experienced by the user or used in that user's own force sensations. In addition, it should be noted that a single client can be interfaced to multiple clients such that a force sensation sent from one client is received by many clients over the network.

In the Claims:

All pending claims are reproduced below. Claims that have been changed by this amendment are labelled as "amended."

1. (amended) A networked haptic feedback gaming system comprising:

a first computer coupled to a network, said first computer including a first visual display and a first interface device capable of providing a first computer input, said first interface device including at least one actuator capable of providing tactile sensations in response to a haptic feedback signal provided by said first computer, said first computer developing a first image in a first gaming environment on said visual display that is associated with first stored tactile sensation information, wherein said first computer produces said first image and said haptic feedback signal based at least in part on game information received from a second computer; and

a second computer coupled to said network, said second computer including a second visual display and a second interface device capable of providing a second computer input, said second interface device including at least one actuator capable of providing haptic feedback in response to a haptic feedback signal provided by said second computer, said second computer developing a second image in a second gaming environment on said visual display substantially simultaneously with said development of said first image in said first gaming environment, said second image associated with stored tactile sensation information, wherein said second